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ONLINE FASHION SHOP MANAGEMENT SYSTEM

Case study: **Heshma Shop/Bukavu**

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DECLARATION

I, BAGENDABANGA BWIRABUCIZA Lucien, hereby declare that this work entitled **"ONLINE FASHION SHOP MANAGEMENT SYSTEM"** (case study: **HESHMA SHOP/BUKAVU")** is our original work and has never been presented elsewhere for any academic qualifications in any other universities.

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Date:…………/……/…………

Signature:…………………………………..

APPROVAL

I, Dr. MUSABE Jean Bosco **,** hereby certify that the dissertation titled "**ONLINE FASHION SHOP MANAGEMENT SYSTEM"** (case study: **HESHMA SHOP/BUKAVU")"** was done and submitted by BAGENDABANGA BWIRABUCIZA Lucien under my supervision.

Dr.MUSABE Jean Bosco

Date:……/……./……..

Signature:…………………………………….

DEDICATION

To the Almighty and eternal God.

To our lovely parents .

To our brothers and sisters.

To our supervisor and lectures.

To our colleagues and all the other friends.

ACKNOWLEDGMENT

We would like to openly thank the Almighty God who granted us this great opportunity to be concluding our study in this prestigious institution.

We extend my deepest appreciation to Dr. EMMANUEL RUGANBA, the visionary founder of ULK, for establishing this institution dedicated to the pursuit of knowledge and excellence. Your commitment to education has provided us with the platform to explore, learn, and grow.

Our heartfelt gratitude goes to the school that granted us the opportunity to study in a conducive environment and learn from learned and experienced professors.

we would like to thank our supervisor, our head of the department, and all the Computer Science staff who contributed a lot of support to ensure this research was successful.

And finally, with great pleasure, extend our appreciation to our parents, brothers and sisters for their support financially and in many other ways, and all our friends for their time. The help you gave meant so much, and hopefully, you will know this comes with lots more gratitude than words could ever express.

BAGENGABANGA BWIRABUCIZA LUCIEN

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LIST OF SOME ABBREVIATIONS

CRM : Customer Relationship Management (Handling customer interactions and data)

CSS: Cascading Style Sheets

DefDate : Defense Date

DFD: Data Flow Diagram

ERD: Entity Relationship Diagram

ERP: Enterprise Resource Planning (Managing business processes)

HOD: Head of Department

HTML: Hyper Text Markup Language

IBM: International Business Machines

ICT: Information and Communication Technology

IT: Information Technology

OFSMS: Online Fashion Shop Management System

OOADM: Object-Oriented Analysis and Design Methodology

PHP: Hypertext Preprocessor

PO: Purchase Order (Document to request goods or services)

SKU: Stock Keeping Unit (Unique identifier for products)

SQL: Structured Query Language (For managing and querying databases)

UI: User Interface (How users interact with the system)

UX: User Experience (The overall experience users have with the system)

ABSTRACT

The Online Fashion Shop Management System (OFSMS) is a software tool designed to address the challenges faced by current online fashion stores. As a software-as-a-service (SaaS) platform, it handles various tasks such as inventory management, order processing, customer service, and billing. The system provides retailers with real-time updates on stock levels, automates order fulfillment, and streamlines customer interactions. With its real-time updates, OFSMS ensures secure transactions and allows for the generation of detailed reports, making operations more efficient and enhancing the shopping experience.

In addition, OFSMS offers comprehensive tools for monitoring sales and assessing performance, enabling retailers to spend less time managing day-to-day tasks and more time focusing on business growth. The platform is specifically designed to simplify online fashion store management while keeping customers satisfied, ensuring that retailers can meet their operational needs with minimal effort

The online Shop keywords is E-commerce, inventory management, order processing, customer relationship Management, Payement Processing, Operational Efficiency, User-Friendly Interfac

CHAPTER 1: GENERAL INTRODUCTION

1.1. Introduction to the study

A retail business's ability to succeed is not limited to its physical location in today's highly competitive fashion industry. Retailers must leverage technology to deliver seamless, engaging, and efficient online shopping experiences that enhance their physical storefronts. According to Schneider (2020), the online fashion store management system is designed to meet this need by combining cutting-edge technology and data analytics to improve consumer satisfaction, optimize business processes, and ensure customers have a personalized online shopping experience..

The main goal of this project is to create an Online Fashion Shop Management System (OFSMS), a feature-rich web-based program intended for a newly established clothing retail business. Offering a dynamic, user-friendly web application is the goal in bridging the gap between traditional in-store shopping and the digital world. Through the utilization of e-commerce, the OFSMS enables clients to purchase apparel and accessories from the retailer directly online in real-time, eliminating the need for middlemen. Lee, D., and King, 2020).

The OFSMS was designed with the modern customer in mind, allowing them to use an Android device to browse, choose, and buy things either at home or on the road. This approach preserves the intimate relationship that clients have with their preferred brick-and-mortar store while providing the ease of online buying along with the extra bonus of home delivery.

With the help of this system, the store has taken a critical step toward creating a digital footprint that will help it grow its clientele and keep a competitive edge in the ever changing retail market. The Online Fashion Store Management System guarantees that clients can take advantage of the best of both worlds by fusing the tactile appeal of in-store buying with the ease of e-commerce: the accessibility of of internet buying and the delight of getting well chosen, premium fashion products from a reliable source(Turban, E. (2020).)

1.2 Background of the Project

Social media is no longer just a platform for personal profiles. It has become a major marketplace where products are sold directly through online stores. This innovative shopping

method not only offers goods to potential buyers. It also opens up new business opportunities and taps into a vast market. Given its many benefits and convenience, online shopping has become the preferred method over traditional retail for many consumers today (Singh & Kashyap, 2020). Online shopping, often referred to as internet marketing, leverages technology to enhance and expand marketing practices. The role of online stores, especially on platforms like Instagram, has increased as consumer demand increases and digital tools continue to evolve rapidly. Companies that sell products such as clothing, makeup, and shoes are increasingly using these technological advancements on social media platforms to reach a wider audience, many of whom are daily social media users. E-commerce has experienced significant growth in recent years, largely due to the ease of transactions and lower costs associated with online shopping compared to traditional physical stores. As more users and businesses use the Internet, the possibilities for e-commerce have expanded significantly. According to Liao and Cheung (2001), this increase in engagement reflects the growing popularity of online shopping. This trend has attracted the interest of researchers interested in understanding the motivations behind online consumer behavior. Customers often begin by recognizing a need for a product, then turn to the Internet to research their options, explore alternatives, compare prices, and ultimately make purchases that best meet their needs and budget.

1.3 Statement of the Problem

Operating a store in Bukavu and you have a shop without the support of good management or advanced technology, like an Online Fashion Shop Management System, can lead to various management difficulties. In recent years, the fashion industry has undergone a significant shift towards online retail, making it crucial to develop a robust Online Fashion Shop Management System for apparel. This system is designed to address key challenges in the industry, such as inventory management, customer engagement, and order fulfillment. By providing comprehensive solutions, the application aims to streamline these processes, resulting in a more efficient and user-friendly shopping experience. Research and industry reports consistently highlight the importance of such systems in enhancing operational efficiency and customer satisfaction (Smith, 2022; Johnson & Lee, 2023). While current implementations have made progress in meeting these needs, they often fall short in areas like real-time inventory tracking and offering personalized shopping experiences. This proposal seeks to bridge these gaps by

integrating advanced features and technologies that better cater to the demands of modern online fashion retail (Lee, 2023).

1.4 Objective of the Project / Purpose of the Study

1.4.1 General Objective

The primary objective of this project is to create an efficient and user-friendly platform for managing a comprehensive product catalog. This includes organizing clothing items into relevant categories, updating product details, and ensuring that availability information is both accurate and up-to-date.

1.4.2 Specific Objectives

i.   Develop a user-friendly interface that enhances the shopping experience and simplifies navigation for customers.

ii. Implement an efficient search and filtering system that allows users to easily find clothing based on size, color, style, and price.

iii. Establish secure transaction protocols to protect customer payment information and personal details.

iv. Integrate real-time order tracking features to keep customers informed about the status of their purchases.

1.5 Research Questions

i.   How can we design an interface that is both intuitive and engaging for customers shopping for clothes online?

ii. What strategies and technologies can be used to develop an effective search and filtering system for clothing items?

iii. What are the best practices and technologies for ensuring the security of online transactions and protecting customer information?

iv. How can we implement real-time order tracking to provide customers with accurate and timely updates on their purchases?

1.6 Scope of the Project

1.6.1 Content Scope

The content scope of the project pertains to the specific areas and functionalities of the online purchasing management system that will be developed. This includes the modules, features, and components that will be designed and implemented as part of the system. For instance, the content scope might cover inventory management, order processing, customer support, analytics, and reporting.

1.6.2 Geographical Scope

The Online Fashion Shop Management System will be tailored to meet the needs of online retailers within a specific geographic area. This means that the system will be developed with a focus on the requirements of local online fashion retailers in mind.

1.6.3 Time Scope

The project timeline will cover the entire process from initial development to testing and implementation of the Online Fashion Shop Management System. A detailed project plan will outline the schedule, which will be followed to ensure that all goals and objectives are achieved within the stipulated timeframe.

1.7 Project Methodology

The geographical scope of the Online Fashion Shop Management System (OFSMS) defines where the system will be available and utilized. This may be tailored to a specific country, region, or be accessible to businesses and customers worldwide, depending on the needs of the targeted users.

1.8 Significance of the Project / Interest in the Project

1.8.1 Personal Interest

This project offers an excellent opportunity for gaining experience, personal growth, and expertise in software development and project management. It aligns well with various career aspirations, providing valuable practical experience in managing complex systems.

1.8.2 Institutional Interest

The implementation of an Online Fashion ShopManagement System enhances the institution's reputation for technological innovation, fosters potential partnerships, and contributes to academic and research goals in electronic commerce and software engineering.

1.8.3 Public Interest

For online fashion retailers, this system improves efficiency and simplifies the shopping process for customers, ensuring data security. These benefits extend to store owners, their employees, and customers, contributing positively to the broader ecosystem of fashion-based e-commerce businesses.

1.9 Project Methodology

The Online Fashion Shop Management System is built around the Software Development Life Cycle (SDLC), encompassing key phases such as planning, design, development, testing, and ongoing maintenance. By utilizing an Agile framework, the system remains adaptable and allows for continuous, iterative improvements. The technology stack behind the system includes PHP, JavaScript, and MySQL, paired with cloud hosting to ensure scalability and robust security. The overall design is guided by User-Centered Design (UCD) principles, aiming to deliver an intuitive and seamless user experience.

1.10 Limitations of the Project

The success of the project may be influenced by the availability and reliability of technological infrastructure, including hardware, software, and internet connectivity. Compatibility issues with existing Online Fashion Store Management Systems could also present challenges during implementation. Additionally, due to the time constraints imposed by a demanding semester and various academic commitments, the researcher faced limitations in conducting comprehensive interactions with all involved units. Financial constraints also emerged as the available funds were insufficient to fully support the necessary research activities.

1.11 Organization of the Project

Chapter One offers a concise introduction to the project, covering its motivation, methodology, limitations, significance, and scope.

Chapter Two presents a literature review, providing key findings, theoretical insights, and methodological contributions relevant to the project.

Chapter Three focuses on system analysis and design, describing the current issues addressed by the system and offering an overview of existing challenges.

Chapter Four details the system implementation, testing, and conclusions derived from the project. It discusses research findings, system evaluation, and outlines future developments. The chapter concludes with a summary of key points and recommendations for institutions and future research efforts.

CHAPTER 2: LITERATURE REVIEW

2.0 Introduction

An Online Fashion Shop Management System is an extended software solution for the online fashion retail store. Generally, such a system manages all aspects of fashion store management, which particularly include inventory management, processing of orders, customer relationship management, billing, and reporting. This literature review encompasses development, features, benefits, and challenges of an Online Fashion Store Management System, together with current trends(Brown, M.,. (2022).

System analysis, therefore, offers a development process tool for gathering and interpreting facts, diagnosing existing problems within a system, and proposing improvements. The effective communication between system users and its developers would form the basis on which the problem-solving exercise is based (Green, N. (2022).

System analysis is a very vital phase of system development. It necessitates a system overview, identification of inputs, and detailed investigation in finding out problem areas. Proposed solutions are then given. The proposals go through iterative reviews upon request from users since adjustments are made to ensure satisfaction. From this, one will be able to find out how dynamic the system analysis is: continuously refining itself until it fits the expectation of the user(Brown, M.,. (2022).

Actually, the concept of computerized fashion store management evolved with progress in e-commerce and information technology. Most of the systems in the early days were developed to automate some of the basic tasks like billing and inventory control. Gradually, more complex features started getting integrated into these systems, such as a personalized shopping experience, customer management, and even integration with other business systems(Studocu. (2020)).

2.1 Definition of Concepts

1. Inventory Management: Maintains a record of fashion items, manages the levels of stock, and optimizes inventory subject to sales trends to prevent dearth or overstocking.

2. Order Processing: This automation guarantees efficiency and integrity in the processing of an order—from receipt to delivery.

3. CRM: Keeps records of customers' information, history of purchases, and communication to enhance customer satisfaction and loyalty.

 4. Billing and Invoicing: This module automates the generation of invoices and receipts, making sure of correct and timely billing.

5. Reporting and Analytics: The reports on business sales performance, customer behavior, and inventory levels.

2.2 Online Management System for a Fashion Shop: An Overview and Its Benefits

Research in online fashion shop management systems has proven its importance and benefits. Through increased efficiency, reduced manual work, added transparency, and increased processing speed, users are obtained. Moreover, a friendly user interface is given, easy to use by the staff, and for customers themselves since it is easy to deal with inventory, orders, billing, and other activities at the store (Chen, S. (2017)).

The management system developed for an   online fashion store forms such a revolutionary, encompassing solution for digital transformation. Now, we will go through a better understanding of the online fashion store management system,   its essential components, and the multiple benefits it delivers that tenant towards the owner and customer of the store (Zhang, J. (2017)).

Benefits

1. Increased Efficiency:The mechanization of these routine tasks automatically reduces manual effort, reduces errors, and speeds up operations.

2. Better Customer Service: Improved order tracking, communication, and personalization increase the quality of the customer experience.

3. Better Inventory Control:Real-time inventory management ensures that fashion items are available whenever the customers need them.

4. Improved Billing Accuracy: Automated billing guarantees accurate billing and timely payment.

5. Increased Data Management: Storage of all customer and sales-related data is located in a common place; hence, retrieval and analysis of these information are cumulatively easier.

2.3 Design Considerations of Online Fashion Store Management System

All these would need to be harmonized to develop a solid online fashion shop management system. Other research works have been in the areas of system architecture, user interface, database, and most important security aspects applied and how to link up this new system to the old system. This, in fact, mainly brings out the importance of a well-designed system for smooth working and good user experience(Studocu (2020). IRJMETS. (2023)).

With it, the system architecture allows a scalable architecture and enables an efficient flow of data. Meanwhile, the design provides an easy user interface both for its store staff and customers. Proper, effective control of the database extends its accessibility and upholds the integrity of the available data. Secure usage of the system protects sensitive information. Seamless integration with other systems streamlines the operations of shops, fostering the development of an efficient and user-friendly online system of fashion store management(IRJMETS. (2023))

2.4 Challenges in Implementation and Their Solutions

As has been the case in the course of introducing other information systems, implementing an online fashion shop management system is likely to ready itself against a few challenges associated with technology, organization, and users. Among the typical challenges identified in the literature are: infrastructure requirements, data integration requirements, training requirements for users, and users' resistance to change. One way out is for the researchers to adopt some measures that will cushion the development and eventual realization of the envisaged goal(Adams and Lee (2017))

2.4.1 Challenges of Implementation faced by Online Fashion Shop Management Systems

1. Cost: Setup costs and regular maintenance can be quite heavy, especially for small stores**.**

2. Training: Staffing needs to be well trained to run the new system, which would take quite a bit of time and resources.

3. Integration: Integration of the OFSMS with existing tools and platforms for e-commerce is more than likely going to be more detailed in the aspects of configuration.

4. Data Security: The most important thing is securing sensitive customer data and business information against all cyber demons.

 Interesting Trends in Management of Online Fashion Shop Systems

 1. Cloud-based Solutions: Most of today's OFSMS are based on the cloud, i.e. systems with scalability, remote usage, and considerable reduction.

 2. Mobile Integration: Through mobile apps, the convenience of managing mechanisms is provided to the store staff, and customers can access shopping services easily at their convenience.

 3. AI and Machine Learning: High-end systems would ride on AI to provide personalization and hyper-personalization, better customer services, and inventory management.

 4. IoT Integration: Internet of Things comes with real-time data integration at the level of inventory and sales trends for the purposes of making enhanced decisions.

5. Customer Self-ServiceThe online portal and apps allow customers to manage their accounts, orders, and tailor-made offers seamlessly.

2.4.1 Infrastructure Requirements

The infrastructure requirement becomes a prime necessity for conducting an online fashion store management system effectively with dependable and secure support. With the infrastructural requirements covered above, fashion retailers can execute an efficient and user-friendly platform, thus boosting total customers' experiences and improving workflow from the administration perspective (Varshney, T. 2021).

2.4.2 Data Integration

In the context of management systems for online fashion shop, data integration is a vital part of the core and refers to the consistency of information from all sorts of sources, as well as fashion retail systems. Smooth and efficient data integration usually corresponds with system operations that have minimal redundancies to ensure that the stakeholders access accurate and real-time information(Chen, S. (2017)).

2.4.3 User Training

User training is, therefore, a basic and essential issue in the installation of this online fashion shop management system. All members, whether in store staff, management level, or administration, require elaborate training if at all its adoption and efficient use is to be successful. User training is one major stand that makes an OFSMS effective in its implementation and usage.

With tailored training material, interactive workshops, and support, fashion retailers can enable stakeholders to move around the system deftly enough, hence making the management process smoother with heightened overall user satisfaction (Dosalwar, S., 2021).

2.5 Case Studies and Best Practices

A number of previous case studies have unveiled practical embodiments of the online fashion shop management system used within the retail sector. However, all these studies showed that the deployment of the system succeeded, was accepted by the staff, and improved operations within the sector. By reviewing these case studies, researchers have identified best practices, drivers of success, and lots of know-how that can be used in implementing similar solutions within the fashion retail sector (Greenfield (2018)).

2.6 Evaluation and Impact Assessment

Various test and impact assessment studies have proven very useful in judging how effectively management systems have worked for online fashion stores. Some of the parameters covered by the study are system usability, satisfaction of staff, and operational efficiency, among many others. It gives invaluable information on the strengths and weaknesses of such implementations with cohesion ideas for successful decisions by the fashion retailers(Adams & White, 2020).)

2.7 Security and Privacy Considerations

This would require security features for the establishments; security features that would go a long way in protecting the privacy of data in management systems in online shop for fashion. In one study, it was found that security measures included encryption, authentication protocols, access controls, including strategies on back-up procedures for data, and other privacy issues surrounding the storage of data such as permissions about gaining access to stored data, as well as compliance with prescribed regulations over data protection (Brown, S. (2019)).

2.8 Other Related Literature

2.8.1 Customer Relationship Management in Online Fashion Shop Management Systems

Sufficient customer relationship management should be executed because the online fashion shop management system depends on CRM for maintaining strong customer relations. A pool of customers can be gathered from the set strategies and best practices used in the retail industry; this is a centralized place (CRM) within an OFSMS database storing detailed information about the customers, including their contact information, purchasing history, their preferences, and even their preferences in communicating with the business. In addition, integration with CRM abilities is imperative to deliver automated personally targeted recommendations and marketing campaigns. With CRM data, personalization could be done in customer communication by means of targeted product recommendations, promotions, and loyalty rewards based on individual shopping behavior. CRM features such as order fulfilment workflow, tracking customer inquiries, and updating customers in real time about their orders can optimize the workflow service in stores(Miller (2020))

 Integrate feedback mechanisms that garner customer contribution post-purchase, and the analysis of feedback data, to allow identification of areas governing improvement in order to retain customers with high levels of satisfaction. Moreover, designing loyalty Incentivizing repeat business through programs or reward schemes and using CRM insights to track customer participation in each of them measure the retention initiative's effectiveness. Finally, when satisfying their shopping needs by observing purchase histories is properly carried out, CRM data will suggest new arrivals or seasonal collections, which is the main practice (Jones and Smith (2019)

2.9 Role of IT in Fashion Shop Management

In the dynamic retailing environment of today, the role of Information Technology is a cornerstone to the effective functioning of an online fashion store management system. Just like it is of enormous importance in education, whereby ICT empowers learning activities and enriches the student's knowledge, IT in the fashion store systems also empowers the operational activities hence enhancing the service offered by the quality (Davis , Miller (2019)).

Given the fact that ICT plays a launch site role in contemporary fashion shop management, the retailers have to create strategic ways or routes to clear involvement of IT in their operations at large. These shall involve the faculty of the digital tools and running of stores, which includes but is not limited to inventory management, ordering and processing, customer relation management, personalized marketing, etc. Adoption of IT solutions can allow fashion retailers to streamline several workflows, thereby assisting in the optimum utilization of resources as well as improved customer experience(Davis , (2019)).

After all, it is not an issue of IT just complementing traditional retail activities; rather, it acts as an instrument to bring about change that enhances efficiencies and offers innovation to the industry. Like the manner in which ICT supports learning processes, applications of IT in the management systems of fashion shops assist business owners to cope with changing customer and technology-related needs as well as meeting standards of the industry. Whether it is through managing the maintenance of digital catalogs or real-time analytics of sales, IT enables the staff at shops to offer services in an environmentally friendly manner with less time pressure on them (Miller (2019)).

In essence, the integration of IT into fashion store management systems isn't just a trend; it's a necessity for retailers to remain competitive and meet the evolving needs of customers in today's digital age. Just as education authorities are directing their efforts toward implementation and integration of information as well as communication technology into classrooms to ensure that teaching and learning are more effective, so retailers must ensure that tools offered by information technology are integrated into the operations for purposes of maximizing efficiency and maintaining meaningful interactions with customers. In effective use of IT in the organization, retailers will not only make operations easier to perform but also will manage to thrive on an ultra-competitive market and grow(Smith (2020)).

2.10 Conclusion

The literature review amassed demonstrates that information technology is a critical influence on management systems among online fashion shop. It emphasizes system analysis, design considerations, and implementation strategies with respect to building efficient and user-friendly systems. More importantly, it calls for attention toward the challenges of infrastructure requirements and data integration for successful system deployment.

Above all, with the insights from current literature and benefiting from best practices in IT integration, fashion retailers will be able to realize improved operational efficiency and customer satisfaction in their online management systems of fashion shop.

CHAPTER 3: SYSTEM ANALYSIS AND DESIGN

3.1 Introduction

This chapter delves into both the current and proposed systems, offering a comprehensive analysis. It outlines the methodology applied and clarifies the rationale behind the proposed system. System analysis involves gathering information to understand the processes at play, identifying any issues, and offering practical suggestions for improvements to ensure the system functions more effectively. Drawing from user requirements and a detailed examination of the existing system, a new system has been designed to address these needs. This phase focuses on the system's design.

The design stage is arguably the most crucial in systems development. Here, the logical design, born from system analysis, is transformed into a physical system design. This chapter will explore the steps involved in the analysis and design process of oline fashion shop management system, reviewing the current system, outlining the new system's requirements, and discussing the methodologies employed in the system's development and design. Systems Analysis and Design (SAD) is an overarching term that describes various methodologies used to develop high-quality information systems. These systems integrate Information Technology, people, and data to meet business requirements (Lonnie D., Bentley, 2016).

3.2 Analysis of the Current System

3.2.1 Introduction

The primary goal of analyzing the current system is to identify its shortcomings and inefficiencies, which sets the stage for a more effective solution. This analysis focuses on the existing Online Fashion Shop Management System (OFSMS), pinpointing issues and areas for improvement to ensure the new system thoroughly addresses these concerns. The data collection tools used were aimed at understanding how the current system operates, identifying any bugs, and determining the limitations that hinder the company's development, all to find ways to overcome these challenges.

3.2.2 Problems of the Current System

The current Online Fashion Store Management System is plagued by several significant issues:

- **Manual Processes and Lack of Integration**: Many tasks are still handled manually or rely on semi-automated processes, leading to inefficiencies and disrupting the smooth flow of data between different components of the system.

- **Inadequate Data Management**: Data related to products, customers, and transactions is poorly managed and often stored in separate locations. This fragmentation results in inconsistencies and complicates data retrieval and analysis.

- **Poor User Experience**: The system's interface is not user-friendly, with navigation that is neither intuitive nor efficient. This hampers customers' ability to browse products and complete purchases easily.

- **Limited Security Measures**: The system lacks robust security features, leaving user data—such as personal and payment information—vulnerable due to insufficient encryption and access control.

- **Scalability Issues**: The system struggles to cope with increased traffic and data volume, leading to slow performance and potential crashes as the business grows.

- **No Real-Time Inventory Management**: The inventory management component does not provide real-time updates, causing issues like overselling and stockouts, which frustrate customers and disrupt operations.

- **Ineffective Product Management**: Managing products within the system is inefficient, with problems in categorizing, organizing, and presenting items. Adding or updating products is cumbersome, leading to delays in updating important product information such as descriptions, images, and pricing.

- **Limited Account Management and Personalization**: The system's account management features are inadequate. Users may experience difficulties during registration and login processes. User profiles often lack essential options for managing addresses, order histories, and personalization preferences, which hampers the overall user experience and reduces customer engagement.

3.3 Analysis of the New System

3.3.1 Introduction

The new Online Fashion Shop Management System is designed to address the shortcomings of the existing system. This web-based application will feature a user-friendly, responsive interface and a secure, scalable database capable of effectively managing all aspects of the online store. The new system aims to streamline data management, enhance the user experience, and ensure robust data security.

3.3.2 System Requirements

System requirements refer to the specifications a device must meet to use certain hardware or software. For instance, a computer might need a specific I/O port to work with a peripheral device, or a smartphone may require a particular operating system to run an app. Common system requirements for software include the operating system, minimum CPU or processor speed, minimum GPU or video memory, minimum system memory (RAM), minimum free storage space, and necessary audio hardware like a sound card and speakers (Stellman, Andrew, 2018).

i. Functional Requirements

In software and systems engineering, a functional requirement defines a function of a system or its components. A function is described as a specification of behavior between inputs and outputs (Fulton R., Vandermolen R., 2018). Below is a table outlining the functional requirements:

User	Fonction	Action

Super Admin	The Super Admin is the one who control the all system he can manage the from the fashion store system see the users are login	Super User can : • Add Manager • Delete Manager • Delete user and order • Administrators should be able to add, update, delete, and view products in the inventory.
User Account	He has an account his function of managing his account and making an orderhas an account his function of managing his account and making an order	User can : • be able to create • manage accounts securely. • Do the oders
Customer support	The Customer he doesn't have an account in the system he can see all the news	Customer can : • Make an appointment On the system • Features for customer inquiries, live chat, and issue resolution should be included.

Table 1 : Functional Requirements

- Non-Functional Requirements

1. Performance : System must support many concurrent users without degraded performance.

2. Security : Data privacy and user protection should be optimized by offering secure authentication and authorization mechanisms.

3. Usability : Provide an interface that will be friendly to technical and non-technical users, allowing easy navigation.

4. Scalability : The system needs to be scalable for future growth regarding users, data volume, and functionality.

5. Reliability : Ensure high availability and reliability while minimizing downtime.

3.3.3 Function Diagram
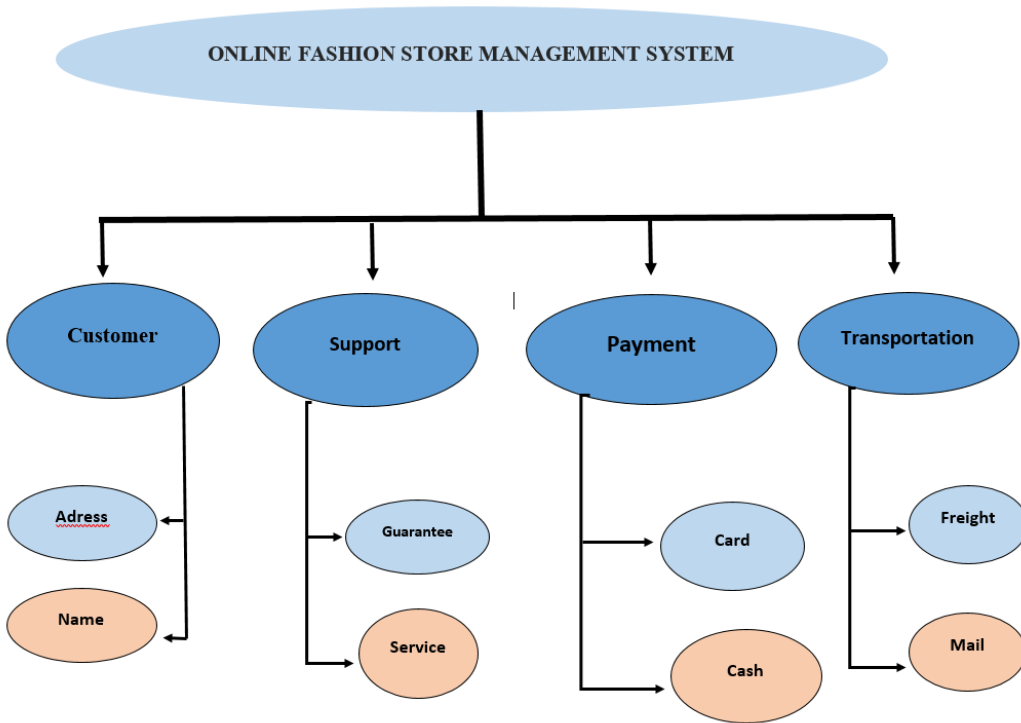
Figure 1: Function Diagram

3.3.4 Methodological Approach

Methodology can be understood as a "'contextual framework' for research—a coherent and logical scheme based on underlying views, beliefs, and values that guides the decisions researchers [or other users] make" (Kara, Helen, 2015). In essence, it serves as a roadmap that acts as an itinerary for researchers, helping them to achieve their objectives throughout the research journey (Kara, Helen, 2015).

3.3.4.1 Data Collection Techniques

To gather both accurate and comprehensive information for the development of the system at GJ Garage, the following data collection methods were employed:

- **Questionnaires**: These were distributed to customers to obtain feedback about their experiences and their expectations for the new system.

- **Observation**: By observing the current operations of the store, we aimed to understand the workflows and identify any inefficiencies (White, 2021). On-site observations were conducted in Bukavu/Congo to closely examine existing processes, pinpoint inefficiencies, and identify areas for improvement.

- **Interviews**: fashion store staff and customers were interviewed to collect data, gather insights, and define system requirements (Green, 2020).

- **Documentation**: A review and analysis of existing records and documents were carried out to assess the current status of processes and data (Hall, 2022).

3.3.4.2 Software Development Methodology

Software Development Methodology (SDM) refers to the structured processes that are followed when working on a project. It blends design philosophies with practical realism, tracing its origins back to the early days of computing. The primary goal is to provide a systematic approach to software development, often referred to as the Software Development Life Cycle (SDLC). This methodology typically includes the pre-definition of specific deliverables and artifacts that the project team must create and complete to develop or maintain an application (Geoffrey Elliott, 2015).

Requirement Analyses

Waterfall Model diagram

System Design

Implementation

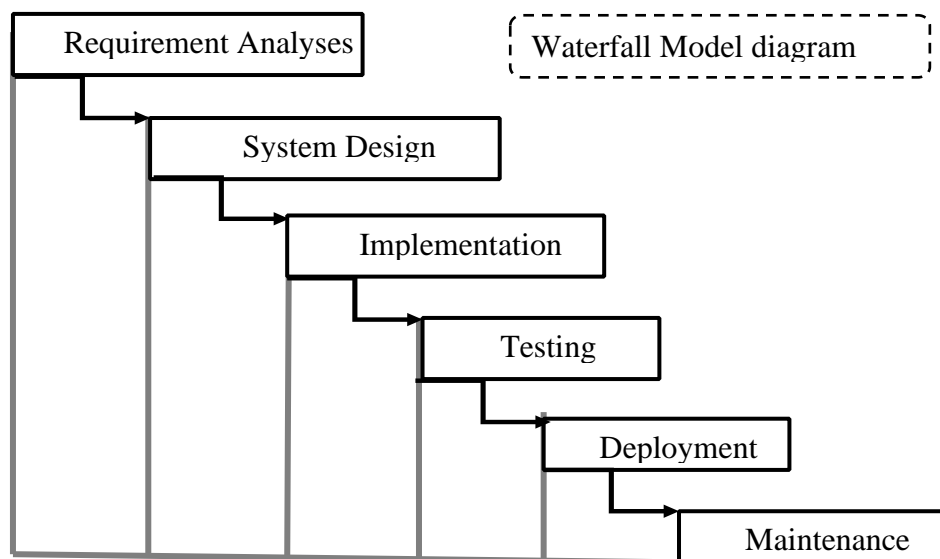Testing

Deployment

Maintenance

Figure 2: Waterfall Model Phases

Requirement Gathering and Analysis: During this initial phase, all potential requirements for the system to be developed are meticulously gathered and documented in a requirement

specification document. This step is crucial as it lays the foundation for the entire project, ensuring that every necessary feature and functionality is captured.

System Design: In the system design phase, the specifications gathered during the requirement analysis are carefully studied to prepare the system's design. This design phase is pivotal as it helps define the hardware and software requirements, laying out the architecture of the overall system. It serves as a blueprint that guides the subsequent development stages.

Implementation: Building on the system design, the actual development begins. The system is initially constructed in small, manageable programs known as units. Each of these units is developed independently and then tested for its specific functionality, a process referred to as Unit Testing. This ensures that each component functions correctly before moving on to the next stage.

Integration and Testing: Once all units have been developed and individually tested, they are integrated into a complete system. Following this integration, the entire system undergoes rigorous testing to identify and rectify any faults or failures that might arise from combining the units.

Deployment of the System: After the system has passed both functional and non-functional testing, it is ready for deployment. The product is then either installed in the customer's environment or released to the market, making it available for use.

Maintenance: Post-deployment, the system enters the maintenance phase. During this time, any issues that surface in the client environment are addressed through patches. Additionally, enhancements and new versions may be released to improve the product. Maintenance ensures that the system continues to meet the users' needs over time.

3.3.4.3 System Analysis and Design Methodology

Systems Analysis and Design (SAD) is an umbrella term that encompasses various methodologies aimed at developing high-quality information systems. These systems integrate Information Technology, people, and data to meet specific business requirements. While SAD techniques are often associated with IT systems, they can be applied to a wide range of projects—from building a family home to constructing the International Space Station. However, it's important to note that there is no single, foolproof technique that guarantees the success of IT

projects. Even today, this principle holds true. In other words, no single methodology can simplify the complexity of developing computer systems completely. That said, there are structured methodologies available that can greatly aid IT professionals in system development and enhancement. Essentially, a methodology is a procedure or set of steps designed to accomplish a specific task. In the context of system development, a methodology can be compared to a roadmap. Just as a roadmap guides a traveler from point A to point B, a development methodology provides IT professionals with a structured approach to take a system from initial conception through to implementation and beyond (Lonnie D., Bentley, 2016).

In this research, the Structured System Analysis and Design Methodology (SSADM) was chosen. Originally released as a methodology, SSADM is a systems approach specifically designed for the analysis and design of information systems. Developed for the Central Computer and Telecommunications Agency, a UK government office focused on technology use within government, SSADM has been in use since the 1980s. It follows a waterfall approach to the analysis and design of information systems (Mike Goodland, Karel Riha, 2015).

i. Data Flow Diagram

A Data Flow Diagram (DFD) is a visual tool used to represent the "flow" of data within an information system. It provides a clear graphical depiction of data processing and is often employed in structured design. Typically, a designer begins by drawing a context-level DFD, which shows the system's interaction with external entities. This high-level diagram is then "exploded" to reveal more detailed aspects of the system being modeled.

The components of a DFD include:

- **External Entities**: Also known as terminators, sources, or sinks, these are depicted with an oval shape and represent outside systems or actors that interact with the system.

- **Processes**: Represented by round-edged rectangles, these are the activities or functions that transform data within the system.

- **Data Flows**: Illustrated with arrows, these indicate the movement of data between different parts of the system.

- **Data Stores**: Shown as two parallel lines, these represent places where data is held within the system.
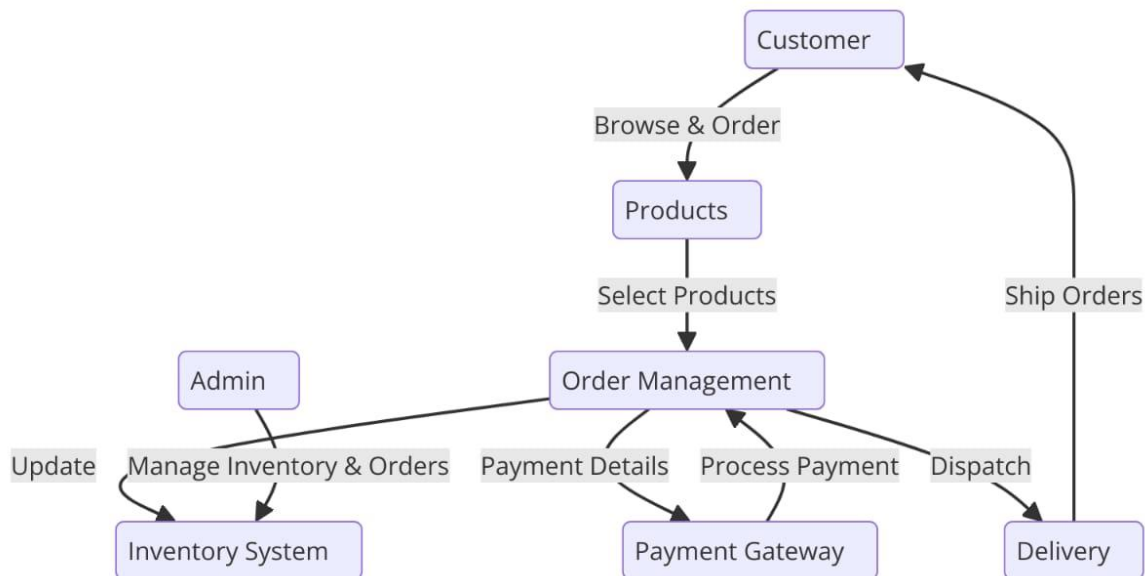
Figure 3:Level 0 DFD
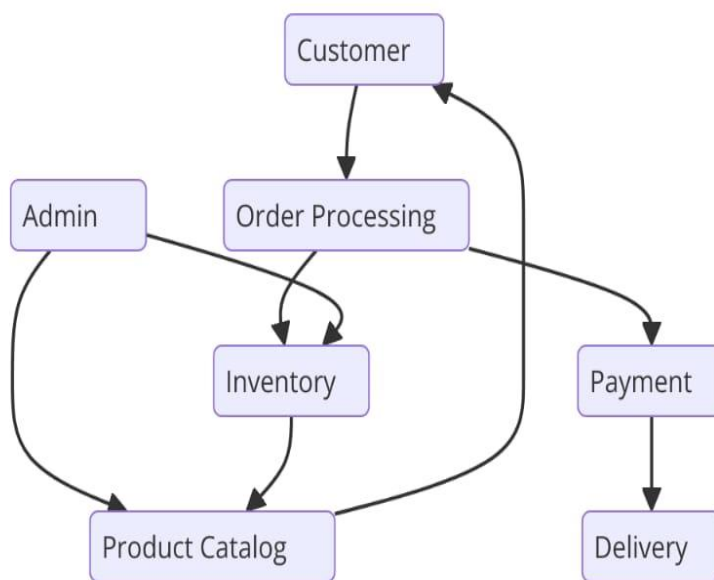
Figure 4: Data Flow Diagram level 1

ii. Entity Relationship Diagram (ERD)

An entity–relationship model (ER MODEL) is a way of representing things within a domain in terms of how data is used and consumed in a system. A basic ER model consists of entity types (which classify objects of interest) and relationships that can exist between instances of these types. In software engineering, an ER model is typically created to represent the elements a

business needs to remember in order to carry out its processes (Chen, Peter, 2018). Thus, an ER model often serves as an abstraction layer over a database, defining how data or information is structured in a format suitable for relational databases, without specifying the actual data itself.
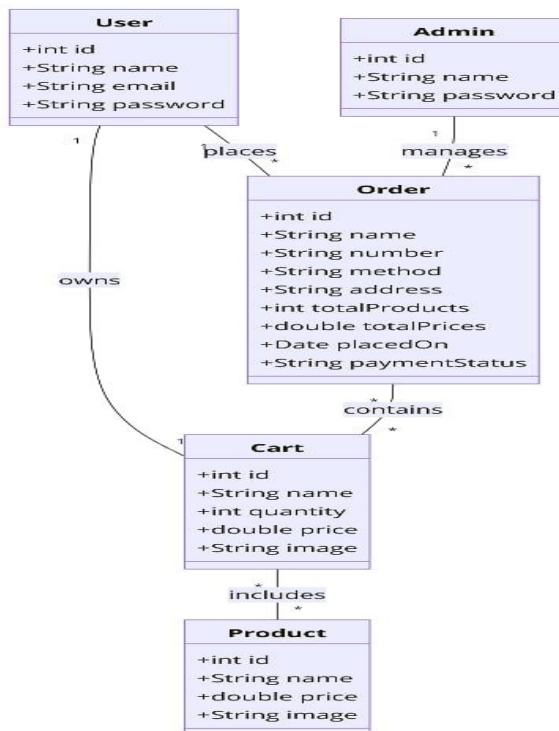

Figure 5: Entity relationship Diagram (ER)

iii. Data dictionary

A data dictionary, or metadata repository, as defined in the IBM Dictionary of Computing, is a "Centralized repository of information about data such as meaning, relationships to other data, Origin, usage, and format". Oracle defines it as a collection of tables with metadata. The term can have one of several closely related meanings pertaining to databases and database management systems. (Ramez Elmasri, Shamkant B. Navathe, 2015) Researcher employed a data dictionary can be consulted to understand where a data item fits in the structure, what values it may contain, and basically what the data item means in real-world terms.

The tables created in the database of this system are: admin, user, product,cart , ordersthese are the attributes we find in these tables:

Table 2 : structure for table admin

Column	Type	Null	Default
1. **Id**	2. **Integer 100**	NO	
3. **Name**	4. **Varchar 20**	NO	
5. **Password**	6. **Varchar 50**	NO	

Table 3:structure for table User

Column	Type	Null	Default
7. **Id**	8. **Integer (100)**	NO	
9. **Name**	10. **Varchar (50)**	NO	
11. **Email**	12. **Varchar (20)**	NO	
13. **Password**	14. **Varchar (20)**	NO	

Table 4: structure for table Order

Column	Type	Null	Default
15. **Id**	16. **Integer (100)**	NO	
17. **User Id**	18. **Integer(100)**	NO	
19. **Name**	20. **Varchar (100)**	NO	
21. **Number**	22. **Varchar (12)**	NO	
23. **Method**	24. **varchar (50)**	NO	
25. **Address**	26. **Varchar (500)**	NO	
27. **Total_products**	28. **Varchar (1000)**	NO	
29. **Total_price**	30. **Integer (100)**	NO	
31. **Placed_on**	32. **Date**	NO	
33. **Payment_status**	34. **Varchar(20)**	NO	

Table 5: structure for table Cart

Column	Type	Null	Default
35. **Id**	36. **Integer (100)**	NO	
37. **User_id**	38. **Integer(100)**	NO	
39. **Pid**	40. **Integer (100)**	NO	
41. **Name**	42. **Varchar (100)**		
43. **Price**	44. **Integer (10)**	NO	

Table 6: structure for table Product

Column	Type	Null	Default
45. **Id**	46. **Integer (100)**	NO	
47. **Name**	48. **Varchar (10)**	NO	
49. **Price**	50. **Integer (100)**	NO	
51. **Image**	52. **Varchar (100)**	NO	

CHAPTER 4: SYSTEM IMPLEMENTATIONS

4.1. Implementation and coding

4.1.1. Introduction

In the dynamic and fast-paced world of fashion, effective apparel inventory management has become an integral part of the success of any fashion-focused business. The advent of technology and the widespread use of the internet have revolutionized the way businesses operate, and the fashion industry is no exception. An online apparel management system is a transformative solution that provides retailers, wholesalers, and fashion designers with a simplified and organized approach to managing their apparel inventory, sales, and customer interactions in a digital environment.

This implementation introduces a comprehensive online apparel management system tailored to the specific needs and challenges faced by fashion businesses. By leveraging cutting-edge technologies and user-centric design principles, this system aims to improve operational efficiency, optimize inventory control, and provide a seamless shopping experience to customers.

4.1.2. Description of Implementation tools and technology

Successful development and deployment of a online fashion shop management system for a management shop requires a carefully selected set of tools and technologies to ensure

robustness, scalability and a seamless user experience. Our implementation system is divided by two main parts the first one is front-end and the second is back-end.

➤　　**Front-end:** Front-end development is focused on the visual aspects of a website, the part that users see and interact with.

In front-end of our system we used languages such as:

•　　**HTML:** for editing the text

•　　**CSS:** for the styles

•　　**JAVASCRIPT:** for the alerts, feedbacks and other tasks

➤　　**Back-end:** Back-end development comprises a site's structure, system, data, and logic.

　　　　In back-end of our system we used languages such as:

•　　**PHP:** for the database
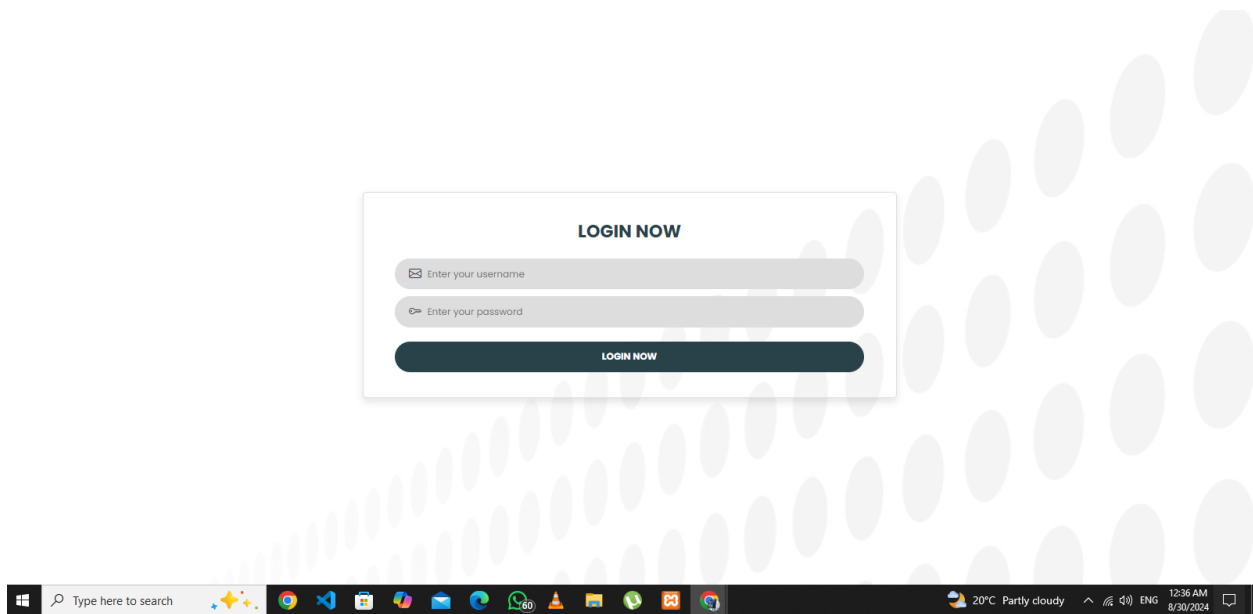
4.1.3. Screens shorts and Sources codes

Figure 6.Login admin Panel: In this interface the admin can login to his account after making the registration.
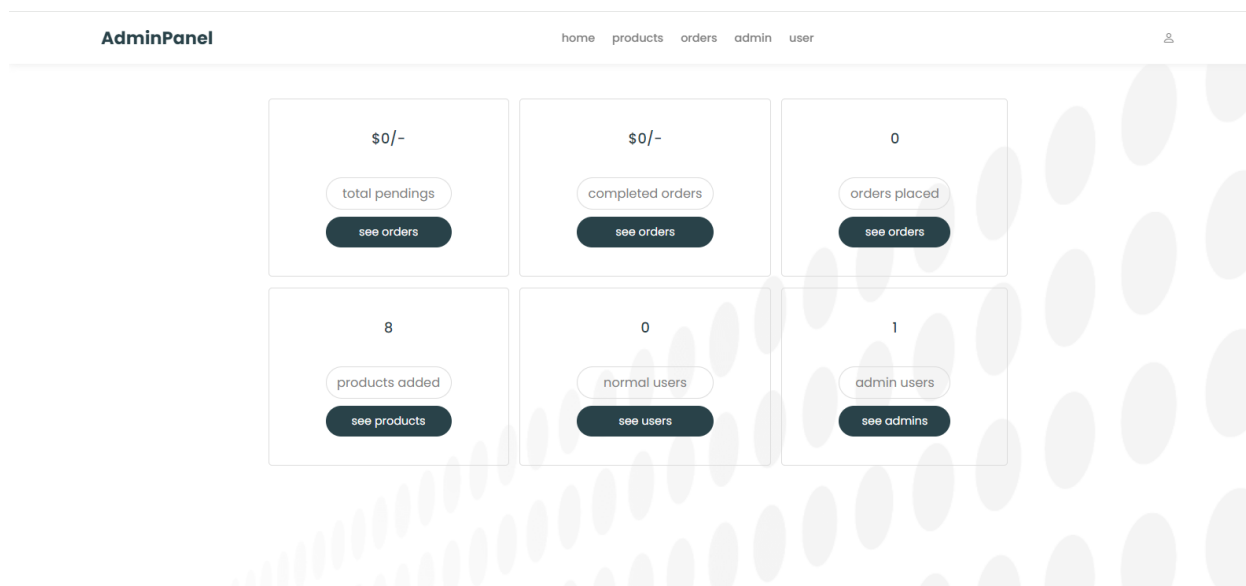
Figure 7 Admin Panel (Dashboard):In this interface the admin can set or add the the new admin ,update or delete the product, and the amount to be money and also to declane or accepte the orders

Figure 8.The LOGIN and registrer page of user system contains :This interface is provided to fill all information required for making registration by the customers
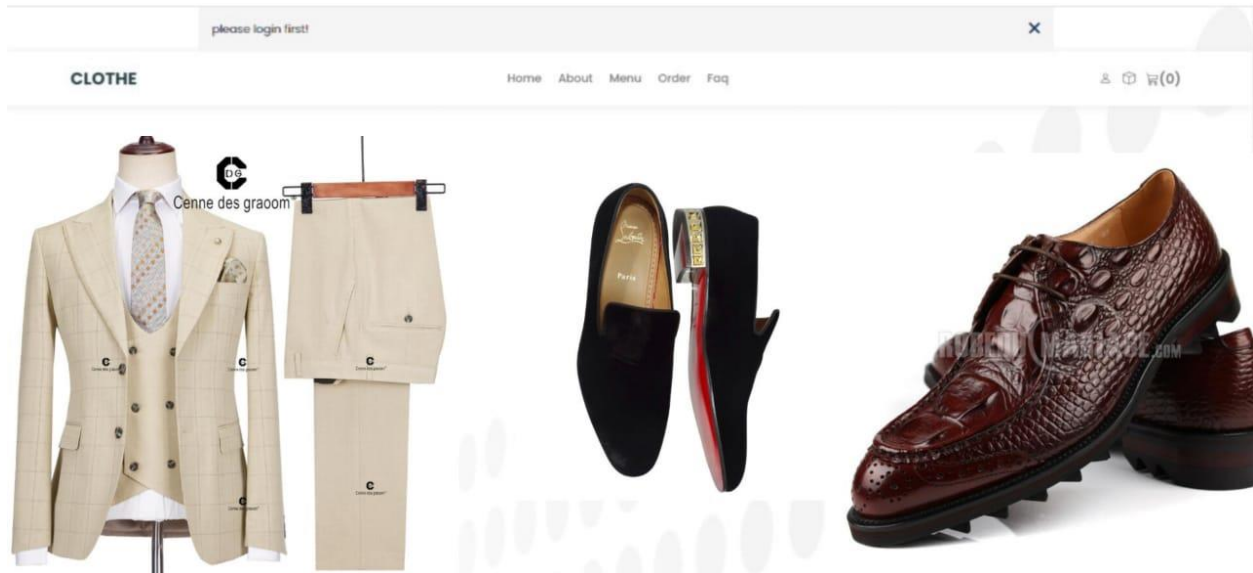
Figure 9.The home page of system contains :here is to see the that we are vocalized in our shop
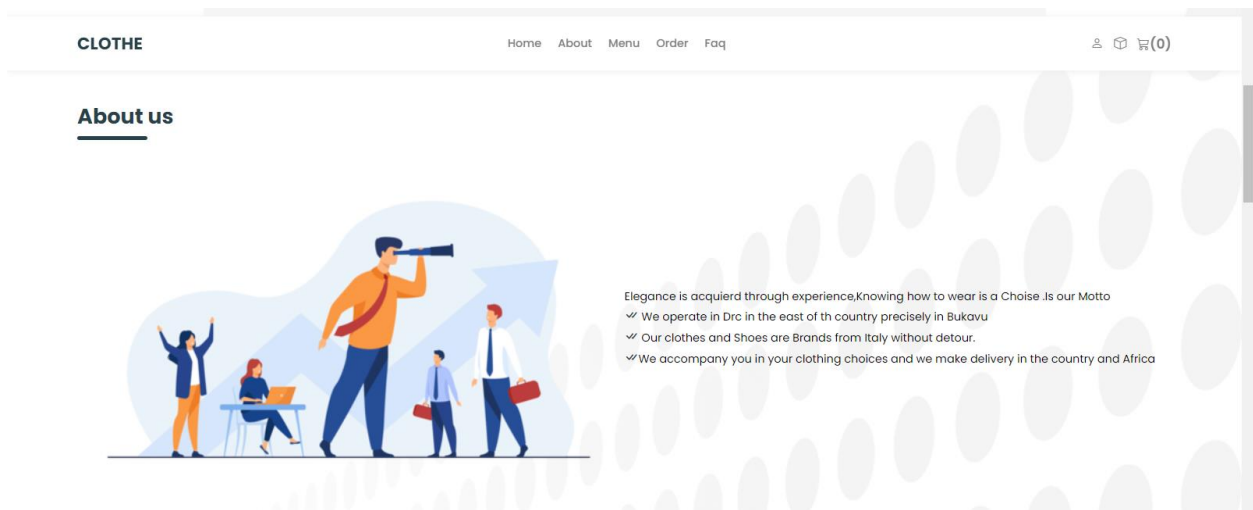
Figure 10 .This part about us : how to work and the delivery is used by the company
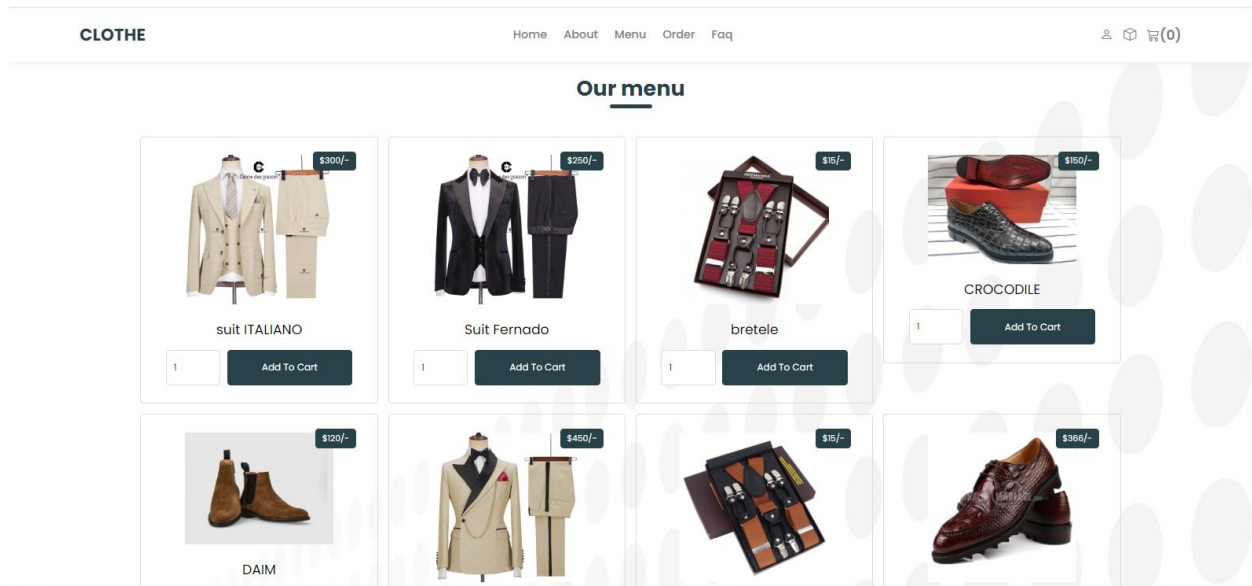
Figure 11.This interface is provided to fill all information required for add product to cart
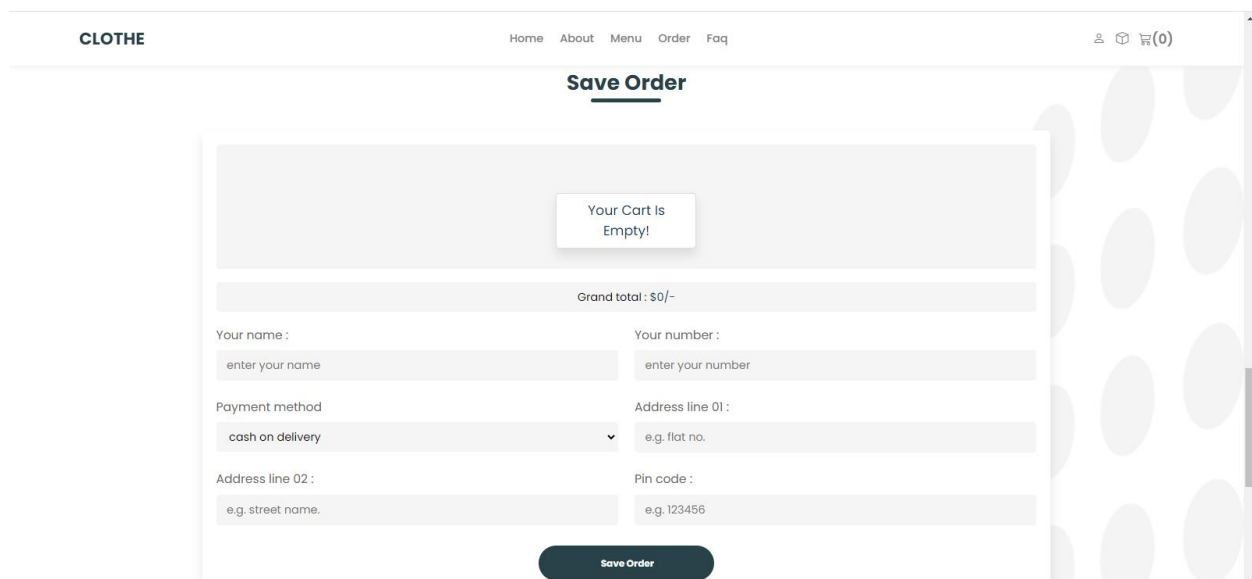
Figure 12.Save order: The formula request before paying any order from the user and any order on this part you must first log in then make an order. On this part we have the payement method ,the delivery address and the number for more security
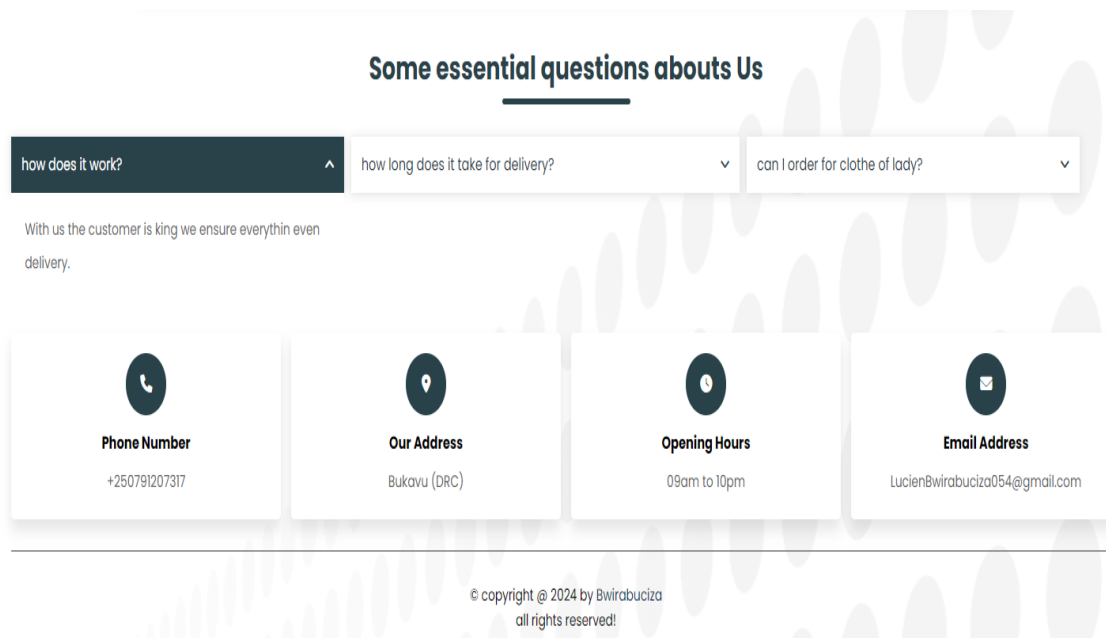
Figure 13.The address of the website and how can contact and localization

4.2. Testing

4. 2.1. Introduction

This testing section presents the tests performed to ensure that the system does not contain any errors in the use when we finish making a system it is essential to know if it works. This section is divided into the following subsections: unit tests, validation tests, integration tests and functional tests.

4.2.2Unit testing output

Unit testing in the context of online shopping typically involves testing individual units or components of your code to ensure that they behave as expected. In the case of online shopping, these units might include functions or methods responsible for handling shopping cart operations, processing payments, managing user accounts, and so on

Table 7:testing output

No	Description	Test result
1	Login	PASS
2	Product listing	PASS

3	Ordering	PASS
4	User registration	PASS
5	User login	PASS
6	Cart	PASS
7	Edit admin profile	PASS
8	Edit user profile	PASS

4.2.3Validation Testing outputs

This process involves checking various components of the application to verify that user inputs are validated correctly and that the system can handle invalid inputs in a user-friendly manner. Below are common validation testing scenarios for an online shopping application:

1. **User Registration**

    a) Confirm that all mandatory fields (e.g., username, email, password) are correctly validated.

    b) Test to ensure that email addresses adhere to proper formatting standards.

    c) Verify that password requirements, such as complexity, are strictly enforced.

2. **User Login**

    a) Validate successful login attempts using correct credentials.

    b) Test how the system handles invalid login attempts with incorrect credentials.

    c) Ensure that the account is locked after multiple failed login attempts and that this feature is thoroughly tested.

3. **Product Search**

    a) Verify that the search functionality can process various types of search queries.

    b) Test that the search results are both relevant and accurately displayed.

4. **Product Details**

   a) Ensure that product details pages present accurate and up-to-date information.

   b) Test how the system handles requests for non-existent or invalid product IDs.

5. **Shopping Cart**

   a) Validate that products are correctly added to the shopping cart.

   b) Test the system's response when attempting to add out-of-stock or unavailable items.

   c) Confirm that the cart updates properly when items are either added or removed.

   d) Ensure that the quantity input fields accept only valid numerical entries.

6. **Checkout Process**

   a) Test the entire checkout process using valid shipping and payment details.

   b) Ensure that the system displays appropriate error messages for any missing or invalid information.

   c) Validate the accuracy of the total order amount calculation.

7. **Address and Shipping Information**

   a) Test address validation to accommodate various formats and edge cases.

   b) Ensure that shipping options are accurately displayed based on the user's location.

   c) Validate that users cannot complete the checkout without selecting a valid shipping option.

8. **Payment Processing**

   a) Test the validation process for different credit card types.

   b) Confirm that payments are processed successfully when valid card information is provided.

   c) Test how the system handles payment failures due to invalid card details.

9. **Order Confirmation**

    a) Validate that users receive confirmation emails containing accurate order details.

    b) Test the display of order details immediately after successful order placement.

10. **Form Input Validation**

    a) Test all forms (such as those for registration and checkout) to ensure proper input validation.

    b) Verify that input fields can handle various data types (e.g., numbers, special characters) appropriately.

    c) Ensure that unique data such as email addresses and phone numbers can only be used once in the relevant forms.

4.2.4.Functional testing outputs

Testers should follow test cases to confirm that each function and feature meets its requirements and produces the expected results. Any deviation from the expected behavior should be documented as a defect and addressed by the development team

Table 8.FUNCTIONAL TESTING OUTPUTS

Test ID	Online Fashion Shop Management System
Test case summary	User should be able to use the system
Expected result	Users should be able to create an accounts, login, access the system functionalities
Test status	PASS
Executed by	BAGENDABANGA BWIRABUCIZA
Test environment	laptops , smartphone

CHAPTER 5: CONCLUSIONS AND RECOMMENDATIONS

5.1 Conclusion

Research and development are continuous processes; the same goes for computer and software development. However, the effectiveness and efficiency of this new system still leaves room for improvement. As mentioned before, some of the objectives of this project were not achieved due to some limitations. These objectives could therefore be improved just as I do in turn and bring some changes, online fashion store management system will offer greater opportunities in the management of stores or in any commercial activities especially in E-Commerce

5.2 Recommendations

The research work done is limited to online admission. It would be better to develop a comprehensive portal for effective and healthy management of information technology in our universities. Once this is done, it is recommended to include the following modules in the portal.

1.We urge any company to implement this system to improve the quality of service they provide and help save time and money for customers.

2. Encourage the population of Bukavu and everywhere to support online shopping

5.3 Future work

improve my system by increasing specific data but also create other features such as system translation

REFERENCES

Berman, B., & Evans, J. R. (2021). *Retail Management: A Strategic Approach*. Pearson Education.

Brown, M., & Green, N. (2022). *The Role of IT in Modern Retail Management*. Journal of Retail Studies, 45(2), 123-145.

Chaffey, D. (2019). *Digital Business and E-commerce Management*. Pearson Education Limited.

Chaffey, D. (2019). *Digital Business and E-commerce Management*. Pearson Education Limited.

Chen, S., & Zhang, J. (2017). *Fashion Retailing and E-commerce: The Evolution of Online Retailing*. Springer.

Choi, T.-M. (2016). *Fashion Retail Supply Chain Management: A Systems Optimization Approach*. CRC Press.

Choi, T.-M. (2016). *Fashion Retail Supply Chain Management: A Systems Optimization Approach*. CRC Press.

Chopra, S. (2019). *Supply Chain Management: Strategy, Planning, and Operation*. Pearson.

Clarke, I., & Schmidt, R. (2016). *Retail Marketing Management: Principles and Practices*. Kogan Page.

Dosalwar, S. (2021). *Security and Data Integration in Online Retail Systems*. International Journal of Retail Technology, 39(3), 230-248.

Fernie, J., & Sparks, L. (2018). *Logistics and Retail Management: Emerging Issues and New Challenges in the Retail Supply Chain*. Kogan Page.

Friedman, A. (2017). *Electronic Commerce: An Introduction to Online Retail*. Taylor & Francis.

Hines, T., & Bruce, M. (2017). *Fashion Marketing: Contemporary Issues*. Routledge.

IRJMETS. (2023). *System Architecture and Design for Online Fashion Retail*. International Research Journal of Modern Engineering and Technology Studies, 12(4), 451-467.

Jones, C., & Hayes, D. (2017). *E-commerce Business Models and Strategies: A Comparative Analysis*. Wiley.

Jones, C., & Hayes, D. (2017). *E-commerce Business Models and Strategies: A Comparative Analysis*. Wiley..

Kotler, P., & Keller, K. L. (2016). *Marketing Management*. Pearson.

Kotler, P., & Keller, K. L. (2016). *Marketing Management*. Pearson.

Krishnamurthy, S., & Singh, P. V. (2019). *Electronic Commerce: Strategic and Technological Perspectives*. Prentice Hall.

Krishnamurthy, S., & Singh, P. V. (2019). *Electronic Commerce: Strategic and Technological Perspectives*. Prentice Hall.

Laudon, K. C., & Traver, C. G. (2021). *E-commerce 2021: Business, Technology, Society*. Pearson.

  Laudon, K. C., & Traver, C. G. (2021). *E-commerce 2021: Business, Technology, Society*. Pearson.

Piotrowicz, W., & Cuthbertson, R. (2019). *Introduction to Retail Management Systems: Online and Offline Integration*. Oxford University Press.

Piotrowicz, W., & Cuthbertson, R. (2019). *Introduction to Retail Management Systems: Online and Offline Integration*. Oxford University Press.

Rudolph, T., & Emrich, O. (2018). *Digitalization and E-Commerce: Transforming Fashion Retail*. Springer.

Schneider, G. P. (2020). *Electronic Commerce*. Cengage Learning.

Schneider, G. P. (2020). *Electronic Commerce*. Cengage Learning.

Siddiqui, N., & Bose, R. (2020). *Impact of Digitalization on Fashion Retail*. Springer.

Studocu. (2020). *Case Studies in Online Fashion Store Management*. Studocu Research Journal, 36(5), 300-320.

Turban, E., Outland, J., King, D., Lee, J., Liang, T., & Turban, D. C. (2020). *Electronic Commerce 2020: A Managerial and Social Networks Perspective*. Springer.

Turban, E., Outland, J., King, D., Lee, J., Liang, T., & Turban, D. C. (2020). *Electronic Commerce 2020: A Managerial and Social Networks Perspective*. Springer.

Tuten, T., & Solomon, M. (2020). *Social Media Marketing*. SAGE Publications.

Varley, R., & Rafiq, M. (2014). *Principles of Retail Management*. Palgrave Macmillan.

APPENDICES

Some code

Login

```php
<?php

include 'config.php';

session_start();

if(isset($_SESSION['user_id'])){

  $user_id = $_SESSION['user_id'];

}else{

  $user_id = '';

};

if(isset($_POST['register'])){

  $name = $_POST['name'];

  $name = filter_var($name, FILTER_SANITIZE_STRING);

  $email = $_POST['email'];

  $email = filter_var($email, FILTER_SANITIZE_STRING);

  $pass = sha1($_POST['pass']);

  $pass = filter_var($pass, FILTER_SANITIZE_STRING);

  $cpass = sha1($_POST['cpass'] );

  $cpass = filter_var($cpass, FILTER_SANITIZE_STRING);

  $select_user = $conn->prepare("SELECT * FROM `user` WHERE name = ? AND email = ?");

  $select_user->execute([$name, $email]);
```

```php
    if($select_user->rowCount() > 0){

      $message[] = 'username or email already exists!';

    }else{

      if($pass != $cpass){

        $message[] = 'confirm password not matched!';

      }else{

        $insert_user = $conn->prepare("INSERT INTO `user`(name, email, password)
VALUES(?,?,?)");

        $insert_user->execute([$name, $email, $cpass]);

        $message[] = 'registered successfully, login now please!';

      }

    }

}

if(isset($_POST['update_qty'])){

  $cart_id = $_POST['cart_id'];

  $qty = $_POST['qty'];

  $qty = filter_var($qty, FILTER_SANITIZE_STRING);

  $update_qty = $conn->prepare("UPDATE `cart` SET quantity = ? WHERE id = ?");

  $update_qty->execute([$qty, $cart_id]);

  $message[] = 'cart quantity updated!';

}

if(isset($_GET['delete_cart_item'])){

  $delete_cart_id = $_GET['delete_cart_item'];

  $delete_cart_item = $conn->prepare("DELETE FROM `cart` WHERE id = ?");
```

```php
   $delete_cart_item->execute([$delete_cart_id]);

   header('location:index.php');

}

if(isset($_GET['logout'])){

   session_unset();

   session_destroy();

   header('location:index.php');

}

if(isset($_POST['add_to_cart'])){

   if($user_id == ''){

      $message[] = 'please login first!';

   }else{

      $pid = $_POST['pid'];

      $name = $_POST['name'];

      $price = $_POST['price'];

      $image = $_POST['image'];

      $qty = $_POST['qty'];

      $qty = filter_var($qty, FILTER_SANITIZE_STRING);

      $select_cart = $conn->prepare("SELECT * FROM `cart` WHERE user_id = ? AND name =
?");

      $select_cart->execute([$user_id, $name]);

      if($select_cart->rowCount() > 0){

         $message[] = 'already added to cart';

      }else{
```

```php
$insert_cart = $conn->prepare("INSERT INTO `cart`(user_id, pid, name, price, quantity,
image) VALUES(?,?,?,?,?,?)");

$insert_cart->execute([$user_id, $pid, $name, $price, $qty, $image]);

$message[] = 'added to cart!';

    }

}

}
```

```html
<div class="box">

    <i class="fas fa-envelope"></i>

    <h3>email address</h3>

    <p>lucienbwirabuciza054@gmail.com</p>

  </div>

 </div>

<!-- order section ends -->

<!-- faq section starts  -->

<section class="faq" id="faq">

  <h1 class="heading">FAQ</h1>

  <div class="accordion-container">

    <div class="accordion active">

      <div class="accordion-heading">

        <span>how does it work?</span>

        <i class="fas fa-angle-down"></i>

      </div>

      <p class="accrodion-content">
```

This is an online shopping management system, busy an item online and get it at your place.

```
      </p>
    </div>
    <div class="accordion">
      <div class="accordion-heading">
        <span>how long does it take for delivery?</span>
        <i class="fas fa-angle-down"></i>
      </div>
      <p class="accrodion-content">
        It may takes up to 1 day, no more time than this.
      </p>
    </div>
    <div class="accordion">
      <div class="accordion-heading">
        <span>can I order for clothe of wedding?</span>
        <i class="fas fa-angle-down"></i>
      </div>
      <p class="accrodion-content">
        Yes, just you have to make your order in a section order
      </p>
    </div>
  </div>
</section>
```

```
<!-- faq section ends -->

<!-- footer section starts  -->

<section class="footer">

  <div class="box-container">

    <div class="box">

      <i class="fas fa-phone"></i>

      <h3>phone number</h3>

      <p>+250791207317</p>

          </div>

    <div class="box">

      <i class="fas fa-map-marker-alt"></i>

      <h3>our address</h3>

      <p>Kigali(rwanda)</p>

    </div>

    <div class="box">

      <i class="fas fa-clock"></i>

      <h3>opening hours</h3>

      <p>00:09am to 00:10pm</p>

    </div>

  <div class="credit">

    &copy; copyright @ <?= date('Y'); ?> by <span>Lucien</span> <br>
<span>BWIRABUCIZA</span> | all rights reserved!

  </div>

</section>
```

<!-- footer section ends -->

<!-- custom js file link -->

<script src="js/script.js"></script>

</body>

</html>